

ABSTRACT

A radiofrequency identification-interrogation unit whose interrogation signal is amplitude-modulated by switching the supply voltage of the output amplifier between two pre-set values. Use is here made of two separate voltage sources, each properly filtered to remove noise components. By including a self-induction in series with the supply voltage input of the output amplifier, there is formed, in combination with the RF decoupling capacitors already present in the output amplifier circuit, a low pass filter circuit, which prevents large peak currents during switching and limits the bandwidth of the modulated interrogation signal. Also, by making the damping factor of the low pass filter circuit settable by means of a settable parallel or series resistance, the form of the modulation of the current in the antenna loop can be optimized.